

OCT - 6 2003

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

Federal Communications Commission
Office of the Secretary

In the Matter of

Petition for Declaratory Ruling on
911 Call Processing Modes

)
)
)
)

WT Docket no 99-328

JOINT PETITION FOR DECLARATORY RULING

AT&T Wireless Services, Inc.
Audiovox Communications Corp.
Audiovox Corp.
Ericsson Inc
Kyocera Wireless Corporation
LG Electronics Alabama, Inc.
LG Electronics U.S.A., Inc.
Matsushita Electric Corporation of America
Mitsubishi Electric Corporation
Motorola, Inc.
Nokia Inc.
Samsung Telecommunications America LLP
Sanyo Electric Co.
Sony Ericsson Mobile Communications Corp.
Sprint Spectrum LP d/b/a Sprint PCS
Toshiba Corporation

October 14, 2003

TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY	1
II.	REGULATORY HISTORY OF CALL COMPLETION.....	6
	A. <i>Second Report And Order</i>	6
	B. <i>Order Approving Methodology Proposed by Nokia</i>	9
	C. <i>Order Approving Methodology Proposed by Ericsson</i>	12
	D. <i>Order Approving Methodology Proposed by Motorola</i>	14
III.	HISTORY OF 911 COMPLAINTS FILED BY PLAINTIFFS	15
	A. Plaintiffs Have Participated in Numerous Commission Proceedings Involving 911 Dialing to Advocate for Their Strongest Signal Patent.....	15
	B. FCC's Investigation of Plaintiffs' Claims	17
	C. Plaintiffs File Complaints in Federal and State Courts	18
IV.	ARGUMENT.....	18
	A. The Commission's 911 Call Processing Policies—and the Industry's Implementation of Those Policies—Have Been a Significant Success.....	19
	B. The Joint Petitioners' Understanding of Call Completion Is Fully Consistent with FCC Call Processing Orders, Underlying Rulemaking Record, Technical Standards for Analog Calls, and Actual Technical Operation of Analog Handsets, While Plaintiffs' Interpretation Is Not	21
	1. The Second Report and Order Clearly Indicates that the A/B-IR Method Approved Would Involve Minor, Inexpensive Modifications to the Software of the Handsets Only and Would Not Require a Change in the Standards	27
	2. Had the Commission Intended to Adopt Plaintiffs' Interpretation, It Would Have Said so Clearly and Unambiguously, and It Would Have Expressly Imposed Obligations on Certain Third Parties	30
	3. Adoption of Plaintiffs' Interpretation Would Have Required an Extended Implementation Period	32
	C. Acceptance of Plaintiffs' Interpretation of Call Completion Would Violate Well-settled Principles of Administrative Law and Procedure	32
V.	CONCLUSION..	34

From November 2002 until January 2003, private plaintiffs, organized by the Wireless Consumers Alliance (“WCA”),⁴ filed ten separate putative class actions in federal and state courts throughout the country against eleven wireless handset manufacturers, including Joint Petitioners, and two wireless service providers. The actions, which were ultimately consolidated before the Court,⁵ allege that 33 handsets produced for sale in the United States fail to comply with the Commission’s *Second Report and Order*.⁶ During the course of the litigation, it became apparent that plaintiffs’ claims depended on when a wireless handset was deemed to have “completed” a 911 call under applicable regulatory rules, policies, and standards.

In the *Referral Order* issued on September 3, 2003, the Court, over the strenuous objection of WCA, granted defendants’ motion for stay on the basis of primary jurisdiction and, accordingly, referred the following questions, relating to the *Second Report and Order*,⁷ to the FCC for its consideration and decision:

- (1) What is meant by “call completion” as that phrase is used in the Commission’s 1999 *Second Report and Order* regarding 911 calls?

⁴ WCA was previously known as the Ad Hoc Alliance for Public Access to 911. For simplicity, both organizations will be referred to herein as “WCA.” Also for simplicity, plaintiffs in the various court cases will be referred to collectively as “WCA” or “plaintiffs.”

⁵ *In re Wireless Telephone 911 Calls Litigation*, MDL-1521, Transfer Order (Apr. 15, 2003).

⁶ Plaintiffs specifically identify 33 handset models in the complaints. However, several of the handsets alleged to be noncompliant were manufactured prior to the effective date of any applicable 911 dialing standard. The allegation that these handsets violate any FCC decision is undeniably erroneous.

⁷ As explained below, the *Second Report and Order* approved three 911 call completion methodologies and authorized the Wireless Telecommunications Bureau (“WTB” or “the Bureau”) to approve additional methodologies. The Bureau has approved three additional methodologies. Handsets manufactured under those methodologies are governed by the requirements set forth in the Bureau’s orders approving each methodology. The Court’s *Referral Order* specifically referenced the requirements contained in the *Second Report and Order* in its questions for the Commission. The definition of call completion is the same for all six approved methods.

(2) What is meant by “delivery of the call to the landline carrier” as that phrase is used in the *Second Report and Order*?

(3) What action must be performed by wireless handsets within the 17-second limit established in the *Second Report and Order*?⁸

The Court directed the parties to seek resolution of these questions before the FCC expeditiously and stayed further proceedings in the litigation pending the agency’s resolution of these issues.

Under all of the call processing methodologies approved by the Commission and WTB, the wireless industry has consistently and uniformly understood “call completion” to occur when a voice or traffic channel is assigned to the wireless handset.⁹ Accordingly, the industry has interpreted the 17-second requirement to mean that assignment of a voice or traffic channel is the task that must be performed within 17 seconds, and if a voice or traffic channel is not assigned within this timeframe, the handset must switch to another system. The industry’s interpretation of “call completion” is consistent with the language of the *Second Report and Order*, which was drafted only after detailed consideration of this issue, as demonstrated in the legal record of that proceeding.¹⁰ This understanding also comports with the underlying technical standards for analog calls and the technical limitation of handsets operating in analog mode. In the years after the *Second Report and Order* was issued, this understanding of “call completion” has been

⁸ *Referral Order* at 7-8.

⁹ Attachment 2 reviews the technical standards for wireless 911 calls and contains a detailed explanation of what takes place at this juncture in a wireless call. See “Review of Technical Standards for Wireless 911 Call Completion And Technical Record Of The Second Report And Order” (2003) (unpublished technical analysis) at 3 (“Attachment 2”). As discussed therein, pressing the “send” button on a wireless handset results in a series of messages between the handset and the wireless base station, which ultimately results in the assignment of a frequency (the strongest signal available on that network) over which a conversation may take place. This is referred to as the assignment of a voice or traffic channel. *Id.* at 3-4. For these purposes, the term “traffic channel” is synonymous with “voice channel” but is often used in describing digital cellular operations. For simplicity, this document will refer to this process as the assignment of a voice or traffic channel.

¹⁰ See *id.* at 6-9.

repeatedly confirmed and re-confirmed in subsequent WTB orders approving additional call processing methodologies and clarifying manufacturers' responsibilities.¹¹

WCA has proposed an alternative interpretation of the *Second Report and Order*—specifically, that the 17-second limit “deems a call ‘complete’ when it is ‘transmitted to the base station and then to the landline phone system.’”¹² The technical implications of the WCA’s interpretation are enormous. These implications also undermine WCA’s central contention. As Attachment 2 makes clear, under the analog standard adopted by reference in the *Second Report and Order* neither wireless handsets nor wireless and landline networks have the technical capability to conduct the signaling and return messaging that would enable a handset to “know” that a call had been passed to the landline carrier, let alone received by such carrier. Indeed, such signaling and return messaging would be patently inconsistent with the underlying standards for analog calls – standards that have been accepted and approved by the Commission and are explicitly referenced in the Commission’s rules. In short, because it would demand extensive signaling – from the handset to the wireless base station to the landline carriers or the public safety answering point (“PSAP”), and then back to the landline carrier to the base station

¹¹ See, e.g., *911 Call Processing Modes*, Order, 15 FCC Rcd 1911 (2000) (“*Nokia Order*”); *911 Call Processing Modes*, Order, 15 FCC Rcd 15671 (2000) (“*Ericsson Order*”); *911 Call Processing Modes*, Order, 18 FCC Rcd 2500 (2003) (“*Motorola Order*”); Letter from John B. Muleta, Chief, Wireless Telecommunications Bureau, FCC, to Steven G. Coston, Sony Ericsson Mobile Communications (USA) Inc. (Sept. 24, 2003) (“*Ericsson Ruling*”).

¹² See *Wireless Telephone 911 Calls Litigation*, MDL Docket No. 1521, Civil Action No. 02-CV-2597, Plaintiffs’ Brief in Opposition to Defendants’ Joint Motion to Stay Pursuant to the Doctrine of Primary Jurisdiction, 9 (filed July 18, 2003) (“*Plaintiffs’ Brief in Opposition*”). At least this is plaintiffs’ current formulation of call completion. Plaintiffs previously insisted during the course of the subject litigation that a call could only be considered complete under the *Second Report and Order* when answered by a 911 operator. See, e.g., *Lage Complaint* at ¶ 30 (“[T]he cell phone must attempt to place the 911 call with the non-preferred carrier if the preferred carrier has not delivered the call to the 911 operator after 17 seconds.”). This earlier formulation is also consistent with other public comments of WCA. See, e.g., *Wireless Consumers Alliance*, available at http://www.wirelessconsumers.org/whats_hot.html (“Cellular telephones are required to connect 9-1-1- calls to the 911 operator within 17 seconds.”).

to the handset – plaintiffs’ proposed interpretation of “call completion” would require radical changes to the standardized methods by which analog calls are made and completed. These changes were never required or even permitted in the technical standard for analog calls that the Commission adopted by reference in the same proceeding and have not been – nor could they be absent another substantial rulemaking – adopted by the Commission.

In its *Referral Order*, the Court found the *Second Report and Order* to be ambiguous and held that it did not clearly set forth the requirements for call completion. The Court found that “given the complexity of the cellular call set-up,” it is proper for the Commission to determine “what is meant by ‘delivery’ of the call to the landline carrier?”¹³ With respect to what act must be performed by the handset in 17 seconds, the Court expressly found that “the Second Report and Order is ambiguous on this issue.”¹⁴

In light of the Court’s referral, Joint Petitioners respectfully seek confirmation from the FCC that: (1) for purposes of the standards adopted by the *Second Report and Order* and in subsequent approvals and interpretations of alternative call processing methodologies, a call or access attempt is deemed “complete” upon the assignment of a voice or traffic channel; (2) pursuant to the same standards, approvals, and interpretations, “delivery of the call to the landline carrier” means transmission by the handset on an assigned voice channel; and (3) pursuant to the time limit adopted by those same standards, approvals, and interpretations, a handset must either receive a voice or traffic channel assignment within 17 seconds or the call attempt must be transferred to another carrier, including a non-preferred carrier. Accordingly,

¹³ *Referral Order* at 6.

¹⁴ *Id.* As indicated above, the Court did not specifically reference subsequent orders by the FCC approving additional call processing methodologies or the effect of those decisions on particular defendants.

Joint Petitioners request that the Commission issue a declaratory ruling confirming this interpretation.

II. REGULATORY HISTORY OF CALL COMPLETION

In 1996, the Commission issued a *Further Notice of Proposed Rulemaking* to develop additional means of improving the ability of analog cellular phone users to successfully complete wireless 911 calls.¹⁵ The Commission issued the *911 Further NPRM* to “explor[e] the need for further action to spur improvements in the features and delivery of [911 and E911] services.”¹⁶ One of the issues on which the Commission requested comment was “whether it would be desirable to establish arrangements and procedures under which all wireless 911 calls could be handled by [any] available service.”¹⁷ The Commission questioned whether it was possible that “a common protocol be developed and incorporated into every mobile system to overcome compatibility or interoperability problems.”¹⁸

A. *Second Report And Order*

This rulemaking process resulted in the *Second Report and Order*, in which the Commission adopted a rule directing manufacturers to “incorporate any one or more of the 9-1-1 call system selection processes endorsed or approved by the Commission” in handsets “capable of operating in the analog mode described in the standard document ANSI TIA/EIA-553-A-1999

¹⁵ *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 18676 (1996) (“*E911 Further NPRM*”).

¹⁶ *Id.* ¶ 133.

¹⁷ *Id.* ¶ 147.

¹⁸ *Id.* ¶ 148.

Mobile Station—Base Station Compatibility Standard (approved October 14, 1999).”¹⁹ Section 22.921 does not define or even include the term “call completion.” However, Joint Petitioners and the Commission uniformly and reasonably understood the concept of “call completion” to mean assignment of a voice or traffic channel – an interpretation consistent with the underlying standards for analog calls and consistent with the technical capabilities and limitations of wireless handsets, transmission equipment, and wireless and wireline networks.

Additionally, against the active opposition of WCA, the FCC examined and approved three different methods of 911 call processing: Adequate/Strongest Signal, Automatic A/B Roaming-Intelligent Retry (“A/B-IR”), and Selective Retry. The *Second Report and Order* also accorded manufacturers the flexibility to use one of the methods approved by the Commission or some combination of approved methods.²⁰

With regard to the A/B-IR call processing methods, the Commission added two conditions: (1) that the handset provide effective feedback to inform the user that a 911 call is in progress; and (2) that the handset seek to complete the call with the preferred cellular carrier

¹⁹ 47 C.F.R. § 22.921 Since February 2003, the rule has read:

911-Only Calling Mode. Mobile telephones manufactured after February 13, 2000 that are capable of operating in the analog mode described in the standard document ANSI TIA/EIA-553-A-1999 Mobile Station—Base Station Compatibility Standard (approved October 14, 1999—available for purchase from Global Engineering Documents, 15 Inverness East, Englewood, CO 80112), must incorporate a special procedure for processing 911 calls. Such procedure must recognize when a 911 call is made and, at such time, must override any programming in the mobile unit that determines the handling of a non-911 call and permit the call to be transmitted through the analog systems of other carriers. This special procedure must incorporate one or more of the 911 call system selection processes endorsed or approved by the FCC.

²⁰ *Second Report and Order* ¶ 82.

within 17 seconds.²¹ In establishing a time limit for the initial call attempt, the FCC stated that: “[i]n general terms, the handset should *seek* to complete the call with the non-preferred cellular carrier if the preferred cellular carrier has not successfully delivered the call to the landline carrier within 17 seconds after the call is placed.”²²

The Commission stressed that the three call processing methods approved by the Commission “are not infallible” and that “present limits of technology deprive us of the opportunity to craft perfect solutions.”²³ The FCC wisely recognized that improved call completion would be an evolutionary process—particularly with the growing dominance of digital technology—and specifically “encourage[d] manufacturers, standards bodies, and others to explore and develop methods of improving 911 call completion.”²⁴ To that end, the agency delegated authority to WTB to “consider and approve, deny, or approve with modifications new or revised 911 call processing modes” as they were developed by handset manufacturers.²⁵

²¹ *Id.* ¶¶ 39-41 (emphasis added).

²² *Id.* ¶ 41 (emphasis added).

²³ *Second Report and Order* ¶ 3. Recognizing the limits of analog technology, and seeking expedited improvement in 911 call processing, the FCC explicitly refrained from requiring substantial modifications to wireless handsets. *Id.* ¶ 35 (new call processing rules would “require only relatively modest changes in handset software that should not be unduly expensive and should not take long to incorporate into mobile units”).

²⁴ *Id.* ¶ 90. Since the *Second Report and Order* dealt only with analog handsets, the Commission particularly encouraged manufacturers to “extend 911 performance improvements” for digital 911 calls. *Id.*

²⁵ *Id.* ¶ 97. The Commission made clear that manufacturers would benefit from having several different methodologies to select from, particularly as new and innovative methodologies were approved by WTB, in that they could “select 911 call completion modes that best suit their needs and preferences.” *Id.* ¶ 80

WTB has considered and approved new call processing methods in three separate orders. These orders, and not the *Second Report and Order*, control compliance under Section 22.921 for those manufacturers utilizing those approved call processing methods.

B. *Order Approving Methodology Proposed by Nokia*

In accordance with the Commission's invitation to seek approval for new call processing modes, Nokia, Inc. ("Nokia") in 1999 petitioned WTB for approval of a modified call processing method that would incorporate call processing methodologies for both analog and digital modes.²⁶ Under the method proposed by Nokia, a handset would first attempt to complete a 911 call on the "presently acquired system" regardless of whether the system was analog or digital. If the access attempt on the cellular network was not completed within 17 seconds—i.e., if there was not a successful voice or traffic channel assignment within that time—the handset would attempt to complete the call using the preferred roaming list of both digital and analog systems. If the call could not be completed on any system on the preferred roaming list, then the handset would try to complete the call on all other compatible systems, analog or digital, regardless of preferences.²⁷

In its request, Nokia clearly indicated that under the proposed methodology a call was deemed "successful" when the handset received a voice or traffic channel assignment in response to a cellular system access attempt.²⁸ Indeed, in specific response to questions raised about call

²⁶ Letter from David Siddall, Counsel to Nokia, Inc., to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, FCC (filed Oct. 27, 1999).

²⁷ *Nokia Order* ¶ 2.

²⁸ See Letter from David Siddall, Counsel to Nokia, Inc. to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, FCC, WT Docket No. 99-328 (filed Nov. 10, 1999) (submitting into the record "Nokia E911 Call Procedures" dated Sept. 30, 1999). Indeed, WCA, which fully participated in the Nokia proceeding, pointed out that "Nokia uses the term 'complete the call' in Sec. 4.0 [of the Call Procedures manual] and the term 'call successful' on its diagram as

completion under its proposed method, Nokia submitted a clarification "that our multi-mode handsets will comply with the time limits [*i.e.*, the 17-second limit] for *access attempts* approved by the Commission for the Automatic A/B Roaming-Intelligent Retry Method."²⁹

With this clarification, WTB approved the Nokia proposed methodology, specifically finding that "Nokia clarified that its multi-mode handsets will comply with the time limits for *access attempts* approved by the Commission for the A/B IR method, specifically the 17-second limit, whether the handset is operating in the digital or the analog mode."³⁰ The FCC found that "[a]pplying the same 17-second limit to Nokia's proposal as that applied by the Commission to the substantially similar AB-IR method should similarly address lock-in concerns."³¹ Nokia has manufactured and sold more than 85 million handsets that incorporate this approved call completion methodology

Just last spring, in response to a request from Nokia, WTB provided further clarification of the *Nokia Order* in a letter ruling from the Chief of the Bureau. In its request, Nokia noted that the "algorithm proposed by Nokia and approved by the Bureau treats a call as being

describing the same event. Its diagram shows that neither term means that the 911 call was connected to the landline carrier." Comments of The Wireless Consumers Alliance, Inc., WT Docket No. 99-328, at 6 n.16 (filed Nov. 30, 1999) (emphasis added).

²⁹ *Ex parte* presentation of Nokia, Inc., WT Docket No. 99-328, at 3 (filed Dec. 30, 1999) (emphasis added). As the phrase implies, "access attempts" refer to handset attempts to access the wireless network for assignment of a voice or traffic channel. Notably, even after this letter was filed, WCA again – and quite correctly – noted in the record: "It is important to understand that the word 'complete,' as used by Nokia does not mean 'connected to the land line carrier.'" *Ex parte* presentation of Wireless Consumers Alliance, Inc., WT Docket No. 99-328, at 3 (filed Jan. 11, 2000). "[T]he process that Nokia describes is one where the call is deemed to be 'completed' when the handset receives an assignment of a voice channel or a digital traffic channel and returns a handshake signal to the base station." *Id.* at 3. WCA also noted that "Nokia has not described any methodology which its handsets will use to determine that the call has been delivered to the landline carrier." *Id.*

³⁰ *Nokia Order* ¶ 5 (emphasis added).

³¹ *Nokia Order* ¶ 5.

successfully completed when the handset receives a voice or traffic channel assignment” and sought confirmation of that fact prior to implementing a major training program for its engineers and technical employees.³² In agreeing with Nokia’s interpretation of the relevant regulations, WTB described the call completion process as follows:

Nokia’s method included a time limit for access attempts similar to the time requirement for the A/B-IR method. Under the *Nokia Waiver Order*, the 17-second time limit is applicable to access attempts. The *Nokia Waiver Order* approved Nokia’s method with the understanding that the handset must first attempt to complete the 911 call with the carrier operating the presently acquired system, and if the access attempts on that system are not successful within 17 seconds, the handset must automatically attempt to make the call on another network. Under Nokia’s algorithm, as approved, access attempts are *deemed unsuccessful if the handset has not received a voice or traffic channel assignment within 17 seconds*.³³

WTB did not express any disagreement with Nokia’s interpretation or with its training program; nor did it indicate that the Nokia interpretation of call completion under the *Nokia Order* was any different from that approved in the *Second Report and Order*.

This interpretation and training program later formed the basis for a compliance plan that was specifically incorporated into a consent decree between Nokia and the Commission’s Enforcement Bureau (“Consent Decree”). The Consent Decree found that the “17 second requirement” was “further clarified” in the *Nokia Ruling*³⁴ and that the principles contained in the training program – including the definition of call completion – “were approved in the [Nokia

³² See Letter from Robert L. Pettit, Counsel for Nokia, Inc., to John Muleta, Chief, Wireless Telecommunications Bureau, FCC, at 1 (May 27, 2003) (“*Nokia Request*”).

³³ Letter from John B. Muleta, Chief, Wireless Telecommunications Bureau, FCC, to Robert L. Pettit, Counsel for Nokia, Inc., at 2 (May 30, 2003) (citation omitted; emphasis added) (“*Nokia Ruling*”).

³⁴ *Nokia Inc.*, Order, 18 FCC Rcd 11395, n 5 (2003) (“*Nokia Consent Decree*”).

Ruling].”³⁵ Over 850 Nokia employees have now been trained under this program – a core principle of which was the definition of call completion as the assignment of a voice channel.³⁶

C. Order Approving Methodology Proposed by Ericsson

Also in 1999, Ericsson Inc. (“Ericsson”) proposed a similar alternative call processing methodology, that was also based on the A/B-IR method approved in the *Second Report and Order*. Like Nokia’s proposed methodology, Ericsson’s proposed methodology was intended to incorporate call processing for 911 calls into the digital mode of its multimode handsets. Under Ericsson’s proposed methodology, if there was no signal on the presently acquired system, its handsets first scan the “A” and “B” band of the analog system, then scan through a defined band order list (whether analog or digital), and finally scan on any frequency band.³⁷

The new method proposed by Ericsson differed slightly from the method under consideration in the *Nokia Order*. Under the methodology addressed in the *Nokia Order*, after the preferred analog system is scanned, other digital systems may be scanned prior to the scanning of the non-preferred analog system. Under the methodology under consideration in the *Ericsson Order*, after the preferred analog system is scanned, the non-preferred analog system is scanned prior to the scanning of other digital systems. Both of these methodologies were significant improvements from the A/B-IR methodology approved in the *Second Report and Order* because both involved scanning digital channels as well as analog channels.

³⁵ *Id.* at 2 n.8.

³⁶ Nokia’s training program identified six core principles of compliance, one of which detailed the 17-second requirement: “The initial access attempts on the ‘presently acquired system’ must not exceed 17 seconds, regardless of whether the handset is operating in the digital or analog mode, before the handset attempts to call on another network.” *Nokia Request* at 2. The training has been certified as in compliance with the Nokia Consent Decree by two outside experts.

³⁷ See *Ericsson Order* ¶ 2

As it had with respect to Nokia's request, WCA opposed the Ericsson request, "claiming that the Ericsson proposal attempts to use a call completion method that was previously rejected by the Commission, [and] does not meet the requirements of the Second Report and Order (particularly the condition that handsets employing the A/B-IR method be switched to the other analog carrier if the call is not successfully delivered to the landline carrier within 17 seconds)."³⁸ WTB disagreed, recognizing that Ericsson's proposed methodology *raised policy issues substantially identical to those considered in the Nokia Order*.³⁹ As WTB stated, the Ericsson proposed methodology was consistent with the "17 second condition"⁴⁰ and "should help achieve the Commission's policy goal of improving 911 completion, notably for the rapidly growing population of digital systems and multimode handsets." Nowhere in the *Ericsson Order* did WTB adopt WCA's interpretation of call completion.

Less than a month ago, WTB reiterated that Ericsson's call processing methodology, which treats a call as completed with the assignment of a voice or traffic channel, fully comports with "the Commission's 911 call processing rules."⁴¹ The ruling came in response to a request by Ericsson for the "Bureau's confirmation that call completion under the *Ericsson Order* occurs when a voice or traffic channel is assigned."⁴² As described by WTB, "Ericsson's method must include a time limit for access attempts similar to the time requirement for the A/B-IR method

³⁸ *Ericsson Order* ¶ 3.

³⁹ *Ex parte* presentation of Ericsson Inc, WT Docket No. 99-328, Attachment at 2 (filed Feb. 2, 2000).

⁴⁰ *Ericsson Order* ¶ 6.

⁴¹ *Ericsson Ruling* at 2 (citing *Ericsson Order* and 47 C.F.R. § 22.921).

⁴² Letter from Steven G. Coston, Technical Manager, Regulatory Services, Sony Ericsson Mobile Communications (USA) Inc to John B. Muleta, Chief, Wireless Telecommunications Bureau, FCC (Aug. 13, 2003) ("*Ericsson Request*").

and the method employed by Nokia. Under the *Ericsson Order*, the 17-second time limit is applicable to access attempts.⁴³ WTB unequivocally confirmed that call completion is the assignment of a voice or traffic channel.

Similar to Nokia's method, the Bureau approved Ericsson's method with the understanding that access attempts are deemed unsuccessful if the handset has not received a voice or traffic channel assignment within a maximum of 17 seconds and that the access attempts must not exceed 17 seconds, regardless of whether the handset is operating in the digital or analog mode, before the handset attempts to call on another network.⁴⁴

Nowhere in the *Ericsson Ruling* did WTB endorse or approve any part of plaintiffs' interpretation of call completion.

D. Order Approving Methodology Proposed by Motorola

In 2002, Motorola requested approval of an A/B-IR-based call processing method designed to facilitate operation under Phase II 911 requirements.⁴⁵ Under the methodology, if a 911 call was terminated prematurely, the handset switched to call-back mode, thereby enhancing the ability of the 911 operator to call the "lost" caller back.⁴⁶ In its filings, Motorola indicated that the methodology considered a call to be completed when a voice or traffic channel had been assigned.⁴⁷

⁴³ *Ericsson Ruling* at 1.

⁴⁴ *Id.* at 2.

⁴⁵ See *Motorola Order* ¶ 3.

⁴⁶ *Motorola Order* ¶ 6.

⁴⁷ *Id.* ¶¶ 3-6; see also *Ex parte* presentation of Motorola, Inc., WT Docket No. 99-328, Exhibit A (filed Sept. 25, 2002) (submitting flow chart that indicates that a call is "connected" when the phone is in "Conversation Mode").

On February 20, 2003, WTB granted Motorola's request. WTB noted that the method "satisfies the Commission's standards for 911 call completion methods."⁴⁸ Nowhere did WTB disagree with Motorola's interpretation of "call completion," nor did WTB indicate in any manner that the method failed to comply with Section 22.921. The *Motorola Order*, like the *Nokia Order* and the *Ericsson Order*, did not adopt plaintiffs' proposed interpretation of "call completion."

III. HISTORY OF 911 COMPLAINTS FILED BY PLAINTIFFS

A. Plaintiffs Have Participated in Numerous Commission Proceedings Involving 911 Dialing to Advocate for Their Strongest Signal Patent

WCA was formed during the rulemaking process that led to the *Second Report and Order* for the primary purpose of lobbying for sole approval of the so-called "Adequate/Strongest Signal" call processing technology. Indeed, the "expert" retained by plaintiffs in their litigation, Robert Zicker, holds a patent that he claims covers the Adequate/Strongest Signal technology.⁴⁹ During the rulemaking proceeding, WCA consistently challenged every other 911 call processing methodology and sought to have the Adequate/Strongest Signal technology be the exclusive required technology in all wireless handsets.⁵⁰ Alternatively, WCA argued that the FCC should mandate that its preferred technology be included in every handset.⁵¹

⁴⁸ *Id.*

⁴⁹ *Second Report and Order* ¶ 66 n.114.

⁵⁰ *See, e.g., Second Report and Order* ¶ 43.

⁵¹ *Id.* ¶ 81.

The Commission refused to take this one-technology approach, noting that there were serious concerns over the effectiveness of the Adequate/Strongest Signal proposal.⁵² Indeed, because of these faults, no one in the industry has employed WCA's Adequate/Strongest Signal method. Instead, the industry uniformly concluded that A/B-IR or another approved methodology would be the best practical and technical fit.

In numerous filings with the FCC, WCA demonstrated its understanding that the A/B-IR methodology and the Commission's rules equated a "completed" call with voice or traffic channel assignment. Indeed, in at least six separate filings, WCA and its predecessor entity, informed the Commission that, under A/B-IR, a call would be treated as completed upon assignment of a voice channel.⁵³ Moreover, WCA clearly understood that adoption of something other than this interpretation would require a change in the underlying analog standard:

In order for the A/B or B/A to meet an equivalent level of service as the Alliance's Strongest Signal proposal, a method of determining adequacy of voice channel service must be established and the handset commanded to rescan all forward control channels upon a loss of voice channel capability. This process WILL require a revision of the 553 Standard, since the subscriber units do not currently possess this function.⁵⁴

⁵² The Commission found that WCA's preferred technology "may also route some calls to [the carrier with the strongest signal] that might have been completed adequately via the preferred carrier and fail to complete calls routed to a carrier that has no available channels. In the latter case, the caller might even experience another type of 'lock-in,' because once the strongest signal algorithm selects a carrier, the caller is stuck with that carrier and may not even be able to access the other carrier by redialing." *Id.* ¶ 79.

⁵³ See, e.g., *Ex parte* presentation of Wireless Consumers Alliance, Inc., WT Docket No. 99-328, at 2 n.2 (filed Jan. 12, 2000) ("It is important to understand that the word 'complete,' as used by Nokia, does not mean 'connected to the land line carrier.'" (emphasis in original)).

⁵⁴ *Ex Parte* presentation of Ad Hoc Alliance for Public Access to 911, CC Docket No. 94-102, Trott Report at 4 (filed Mar. 20, 1998) (emphasis in original). Attachment 2 contains numerous quotes from WCA's record filings which show that WCA clearly understood both the industry standard and the technical implications of WCA's proposed changes to that standard. Attachment 2 at 6-8.

WCA effectively conceded that, if the Commission did not require a significant revision of the 553 standard, the FCC could not require handsets utilizing the A/B-IR methodology to determine adequacy of voice channel service.

WCA has gone to extreme lengths to promote its Adequate/Strongest Signal proposal. In the proceeding that adopted the alternative Nokia call processing method, WCA went so far as to oppose the extension of 911 calling benefits to the digital standard, even though it was obvious that digital transmissions would become the dominant technology.⁵⁵ The FCC, however, rightly rejected the WCA position. After the close of the Nokia proceeding, WCA admitted that there was nothing in the record to support the WCA definition of call completion.⁵⁶ Nevertheless, despite this acknowledgement and the Commission's effective determination that WCA's definition of call completion was untenable, WCA has continued to pursue its position through litigation and even antitrust claims against wireless carriers.⁵⁷

B. FCC's Investigation of Plaintiffs' Claims

In November 2002, representatives of WCA presented its position—that no wireless phone on the market complied with the Commission's 911 rules—to the staff of the Enforcement Bureau. As a result, the Bureau commenced its own investigation into plaintiffs' claims. On December 13, 2002, the Enforcement Bureau sent letters of inquiry to eleven manufacturers seeking information about the models of phones identified by WCA, including any tests the

⁵⁵ *Ex parte* presentation of Wireless Consumers Alliance, Inc., WT Docket No. 99-328, at 2 (filed Dec. 21, 1999).

⁵⁶ *Ex parte* presentation of Wireless Consumers Alliance, Inc., WT Docket No. 99-328 (filed Feb. 24, 2000).

⁵⁷ *Wireless Consumers Alliance, Inc. v. AT&T Cellular Services, Inc.*, Case No. 1:2002cv02637 (S.D.N.Y.); *Millen v. AT&T Wireless PCS, LLC*, Case No. 02-11689WGY (D. Mass.).

manufacturers conducted to ensure handset compliance with an approved call protocol under Section 22.921 of the Commission's rules. To the best of the manufacturers' knowledge, the Enforcement Bureau has, since November 2002, continued to investigate plaintiffs' allegations. These allegations are based on plaintiffs' incorrect interpretation of compliance with the FCC's *Second Report and Order* and subsequent decisions of the Commission, as discussed above.

C. Plaintiffs File Complaints in Federal and State Courts

Beginning in November 2002, plaintiffs filed ten separate putative class actions in federal and state courts throughout the country against eleven wireless telephone manufacturers and two service providers. Collectively, the actions allege that 33 models of wireless telephones fail to comply with the FCC's rules regarding the processing of 911 calls.⁵⁸ Plaintiffs seek to enjoin the manufacture and sale of any handsets that fail to meet WCA's interpretation, as well as litigation costs and attorneys' fees. The Judicial Panel on Multidistrict Litigation transferred all of WCA's multiple cases to the Northern District of Illinois. Despite plaintiffs' strenuous opposition, the Court referred the definitional issues surrounding the concept of call completion to the Commission in light of its expertise in this area.

IV. ARGUMENT

The litigation underlying this referral represents the continuation of a debate—now taken up by the plaintiffs bar in class actions—that was decided by the Commission in 1999 and has been repeatedly affirmed by WTB in a series of decisions and clarifications. WCA has repeatedly sought to obligate the industry to adopt Adequate/Strongest Signal proprietary

⁵⁸ See, e.g., *Aggarwal* Compl. ¶ 13 (naming eight different Nokia phone models); *Bass* Compl. ¶ 18 (naming three different Samsung phones); *Liff* Compl. ¶ 12 (referring to 7 models of Motorola phones); *Lage Am. Compl.* ¶ 31 (stating that plaintiffs' expert has tested 33 total phone models).

technology by objecting to every other approach, even taking the untenable position that the benefits of 911 calling requirements should not be extended to the digital protocol contained in multimode handsets.

Simply stated, WCA believes that the Commission erred in declining to adopt WCA's proprietary Adequate/Strongest Signal method as the *exclusive* means of wireless 911 call processing and in taking a flexible approach to this technological issue. WCA has therefore sought to relitigate and re-argue the Commission's decision in the *Second Report and Order*. Having tried on several occasions to get the Commission to adopt its interpretation, having sought to induce the Court to adopt its views, and having struggled mightily to keep this issue from the Commission on referral from the Court, WCA essentially now seeks an interpretation of FCC rules and policies that would outlaw virtually every wireless handset sold in the United States since the *Second Report and Order*. Perhaps even more significantly, WCA seeks a decision that would deny consumers the substantial benefits of handsets with enhanced 911 call processes and the evolution of those handsets to the digital world.

Joint Petitioners respectfully urge the Commission to reject WCA's strategic forum shopping, put an end to this protracted policy debate once and for all, and clarify that WCA's interpretation of the *Second Report and Order* is unreasonable, unworkable, and wrong.

A. The Commission's 911 Call Processing Policies—and the Industry's Implementation of Those Policies—Have Been a Significant Success

In testament to FCC rules and policies that have allowed the smooth evolution and substantial improvement of 911 call processing methodologies, thousands of wireless 911 calls reach emergency first responders every day. It speaks volumes that WCA has been unable to cite even a single instance in which a wireless 911 call has not reached emergency personnel

since adoption of the *Second Report and Order*.⁵⁹ The Commission's policies in this area, and the industry's implementation of those policies, have been a remarkable, if largely unsung, success.

This success has its roots in the *Second Report and Order*, where the Commission sought to "improve the ability of analog cellular phone users to successfully complete wireless 911 calls" to impact positively "the security and safety of analog cellular subscribers, especially in rural and suburban areas."⁶⁰ Therefore, the Commission adopted a rule requiring analog cellular phones to process 911 calls separately so that they could be handled by either cellular carrier in the area. Today, the Commission's goal of improving 911 reliability has been realized in large part because wireless equipment manufacturers have faithfully implemented 911 call processing into their wireless handset products. Since Section 22.921 became effective in February 2000, literally tens of millions of multimode and analog-only handsets with 911 call processing methodologies have been manufactured and exported to the United States by Joint Petitioners.⁶¹

Wireless handset manufacturers have fully adhered to Section 22.921, and the result has unquestionably benefited the public. Prior to implementation of Section 22.921, wireless handsets operating in analog mode generally did not seek to complete a 911 call on the non-preferred analog network if no signal was detected on the preferred analog network. Now they do, and such is the direct result of the adoption of Section 22.921 and the manufacturers'

⁵⁹ *In re Wireless Telephone 911 Calls Litigation*, MDL-1521, Hearing Transcript, at 11-12 (May 28, 2003). Judge Grady: "Do you have any actual instances of unfortunate circumstances, such as the ones that precede the adoption of this policy in the first place? [Plaintiffs' Counsel]: We don't, your Honor."

⁶⁰ *Second Report and Order* ¶ 1.

⁶¹ For example, between May 2000 and August 2003, Nokia alone manufactured approximately 85 million handsets with an analog component.

adherence to that regulation. Prior to the implementation of Section 22.921, wireless handsets operating in analog mode also did not seek to complete a 911 call on a non-preferred network if a signal was detected on the preferred analog network but there was no voice channel assigned. Once again, as a result of Section 22.921 and the manufacturers' adherence to that regulation, now they do.

Furthermore, even though not required to do so in the *Second Report and Order*, virtually all of Joint Petitioners' handsets not only seek to complete 911 calls on analog networks, but also on digital networks. Given that the vast majority of all wireless calls are now completed on digital networks,⁶² this is a tremendously important voluntarily implemented improvement. Simply put, wireless handset manufacturers have done even more than the Commission required in the *Second Report and Order*, not less. Acting cooperatively, manufacturers and the Commission have implemented policies that have been of enormous benefit to the American public.

B. The Joint Petitioners' Understanding of Call Completion Is Fully Consistent with FCC Call Processing Orders, Underlying Rulemaking Record, Technical Standards for Analog Calls, and Actual Technical Operation of Analog Handsets, While Plaintiffs' Interpretation Is Not

Each call methodology approved by the Commission supports Joint Petitioners' understanding of "call completion." In fact, two recent clarifications from WTB—one of which was provided less than a month ago—unquestionably establish that phones manufactured under the *Nokia Order* and *Ericsson Order*, both of which are based upon access attempts and define

⁶² *Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, Eighth Report, 18 FCC Rcd 14783, ¶ 61 (2003) ("Digital subscribers made up approximately 88 percent of all wireless subscribers at the end of 2002, up from 80 percent at the end of 2001."); *id.* ¶ 78 ("278 million people, or 97 percent of the total U.S. population, live in counties where operators offer digital mobile telephone service").

call completion as the assignment of a voice or traffic channel, are fully compliant with the Commission's 911 call processing requirements.⁶³ While WCA has vigorously and frequently presented its views about call processing to the Commission, the record clearly reveals that the Commission has not adopted its interpretation of call completion.

Most recently, on September 24, 2003, WTB confirmed that Ericsson's methodology, under which "call completion . . . occurs when a voice or traffic channel is assigned,"⁶⁴ fully "satisfies the Commission's 911 call processing rules."⁶⁵ Further, the Bureau explicitly stated that "access attempts are deemed unsuccessful if the handset has not received a voice or traffic channel assignment within a maximum of 17 seconds."⁶⁶

The *Ericsson Ruling* puts beyond doubt that Ericsson and any manufacturer adhering to the methodology adopted in the *Ericsson Ruling* have fulfilled their 911 call processing obligations upon the assignment of a voice or traffic channel. The *Ericsson Ruling* further confirms that Joint Petitioners' interpretation is wholly consistent with the requirements of the *Second Report and Order*. WTB cited the rule adopted by the *Second Report and Order*,⁶⁷ described Ericsson's methodology as including "a time limit for access attempts similar to the time requirement for the A/B-IR method,"⁶⁸ and noted that Ericsson had previously "clarified

⁶³ These WTB letters served only to clarify, rather than modify, an existing Commission rule. See *Sprint Corp. v. FCC*, 315 F.3d 369 (D.C. Cir. 2003).

⁶⁴ *Ericsson Request* at 1-2

⁶⁵ *Ericsson Ruling* at 2 (citing *Ericsson Order* and 47 C.F.R. § 22.921).

⁶⁶ *Id.* at 2.

⁶⁷ *Id.*

⁶⁸ *Id.* at 1.

that its multi-mode handsets will comply with the time limits for access attempts approved by the Commission” in the *Second Report and Order*.⁶⁹

On May 30, 2003, Nokia likewise requested that the Bureau confirm that “under the call completion method proposed by Nokia and approved by the Bureau in the *Nokia Order*, an access attempt is deemed ‘successfully completed’ when the handset receives a voice or traffic channel assignment.”⁷⁰ In response, WTB specifically ruled that “[u]nder Nokia’s algorithm, as approved, access attempts are deemed unsuccessful if the handset has not received a voice or traffic channel assignment within 17 seconds,”⁷¹ and, thus, that handsets are only required to switch to another channel or network if the handset has not received a voice or traffic channel assignment within 17 seconds.

Like the *Ericsson Ruling*, the *Nokia Ruling* makes clear that Nokia and any manufacturer adhering to the methodology adopted in the *Nokia Ruling* have fulfilled their 911 call processing obligations upon the assignment of a voice or traffic channel. Thus, it is hardly surprising that there is absolutely no hint in the *Nokia Ruling* or in the underlying *Nokia Order* that call completion means anything other than the assignment of a voice or traffic channel much less, as plaintiffs insist, that handsets be required to know when and if a 911 call has been handed off to a landline carrier. Likewise, there is no hint in either decision that WTB understood its rulings to be anything other than fully consistent with the *Second Report and Order*.

⁶⁹ *Id.* at n.8.

⁷⁰ *Nokia Request* at 2. In its request, Nokia indicated that the “algorithm proposed by Nokia and approved by the Bureau treats a call as being successfully completed when the handset receives a voice or traffic channel assignment” and outlined a proposed training program which explicitly defined call completion as the assignment of a voice or traffic channel. *Id.* at 1.

⁷¹ *Nokia Ruling* at 2.